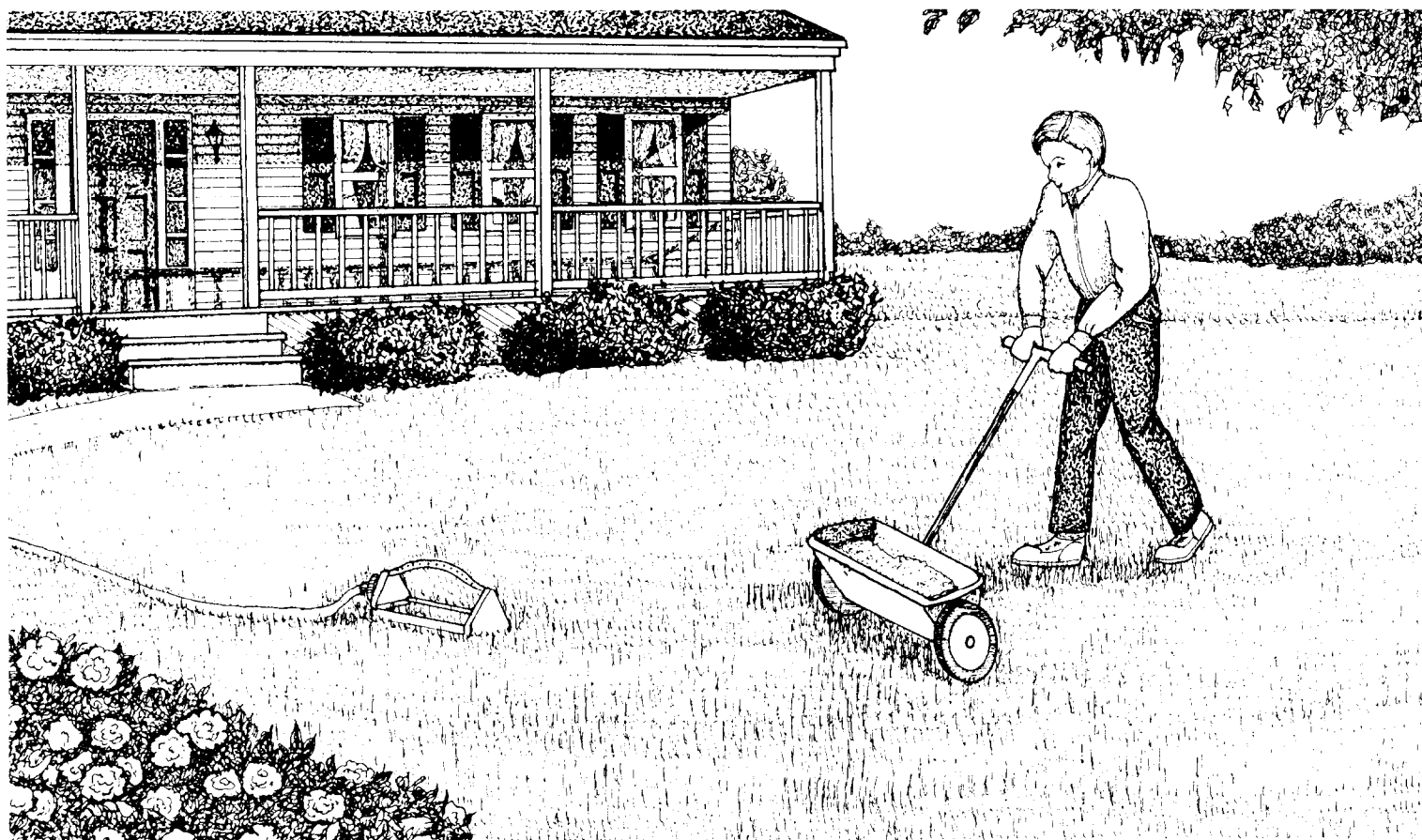


SOUND GARDENING

Gardening With an Eye on Water Quality

LAWNS



If You Have a Yard, You Probably Have a Lawn

Most lawns do not have to be meticulously managed to be healthy and look good. Selecting the right species and varieties, fertilizing 1 to 3 times per year, proper mowing and thatch management and timely summer watering contribute to keeping the lawn healthy.

Some gardeners, in an attempt to achieve a perfect

lawn, may use excessive amounts of fertilizers and water and/or improperly use pesticides. Over-fertilization is a waste of money and may pose a hazard to the environment. The Long Island Sound Study found excessive nitrogen exacerbates summertime low dissolved oxygen levels in the Sound's waters. Many of the newer grass varieties retain good green color with reduced amounts of fertilizer and, in many cases, less water.

The Sound Gardening approach to lawns is to use insect, disease and drought-tolerant grasses that require less chemicals and water, thereby providing for a more chemical free environment.

- * Manage lawns properly to minimize the need for pesticides.
- * Do not overfertilize.
- * Always use slow-release fertilizers.
- * A **healthy**, dense lawn will help reduce weed invasion and is the best defense against pesticide and fertilizer runoff into Long Island Sound.
- * Use grasses with known tolerance to insects, disease and drought.
- * When using pesticides, always follow the label instructions and precautions.

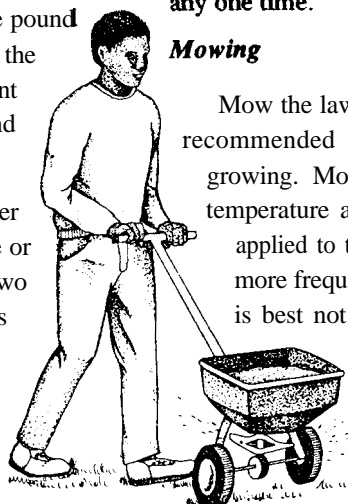
Establishment

Planting recommended species and varieties for your area will go a long way toward preventing problems. Tall and fine-leaf fescues are considered low maintenance grasses and generally require less water, fertilizer and pesticides. Selected varieties of perennial ryegrasses and Kentucky bluegrasses also perform well under low maintenance conditions. Some perennial ryegrasses contain beneficial fungi called endophytic fungi that render those varieties resistant to certain turf insects such as chinch bugs and sod worms. Check seed packages to see if they contain endophytic fungi.

Fertility

Maintain the proper level of soil fertility and avoid over-fertilization by following soil test recommendations. It is best to use slow-release types of nitrogen. Do not apply more than one pound of actual nitrogen per 1,000 square feet at one time. To determine what one pound of actual nitrogen is, divide the first number on the fertilizer bag into 100. The result is the amount (in pounds) you should take out of the bag and apply over 1,000 square feet of lawn.

The number of applications of fertilizer per year is best determined by turf type. Where fine or tall fescue-type grasses predominate, one to two applications are suggested. The bluegrasses generally require three applications. Recommended application times coincide with three different holiday periods: Memorial Day, Labor Day and Thanksgiving.

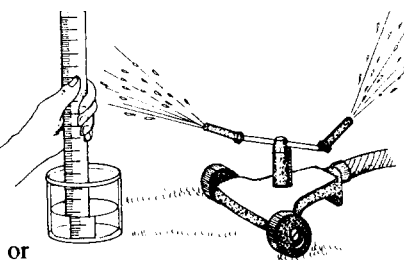


Amount of Fertilizer to Use

(for each application on established lawns)	
% Total Nitrogen	Lbs Fertilizer/1,000 square feet (as listed on label)
4	25
5	20
6	17
7	14
8	12 1/2
9	11
10	10
20	5
25	4

Water

Most lawns require about one inch of water per week, either in the form of irrigation or natural rainfall. Some factors influencing the amount of water needed are: grass and soil type, amount of rainfall, relative humidity and wind speed. If you see the shape of your footprints in the lawn when you walk across it, it's past time to water (provided the grass isn't too long).



Limestone

Have a soil pH test done to determine how much limestone the lawn needs. Proper pH, 6.2 to 6.5, can enhance the grass' ability to take up valuable fertilizer, tolerate drought conditions and resist diseases. Limestone can be applied at any time of the year when the ground is not frozen. It is generally recommended that no more than 100 pounds per 1,000 square feet be applied at any one time.

Mowing

Mow the lawn throughout the growing season at the recommended height for the species of turfgrass growing. Mowing frequency is determined by the temperature and the amounts of water and fertilizer applied to the lawn. The more fertilizer applied, the more frequently the lawn will have to be mowed. It is best not to remove more than one-third of the grass plant at any one time. Clippings can be left where they fall if they are less than one inch in length. This will reduce the amount of fertilizer needed

by 25%, since turfgrass clippings contain nutrients that are released back to the soil. If clippings are too long, add them to the compost pile. Mower blades should be kept sharp as dull blades can fray grass tips, giving the lawn a whitish-brown appearance.

Mowing Heights

Turf-type tall fescue – 2 1/2" – 3"

Perennial ryegrass and fine-leaf fescue – 2" – 2 1/2"

Kentucky Bluegrass – 2" – 2 1/2"

Aeration

Some areas in our region have clay soil or soil that has been poorly managed or compacted. This creates a **hardened**, poorly drained and aerified soil. Aerating this type of soil can be of some benefit as it will allow oxygen and water to get to the grass' roots. Spring or fall is the best time to aerate. If the compacted soil layer is more than three to four inches thick, aeration is of little value because most aerifiers do not penetrate below four inches.

De-Thatching

Heavy thatch restricts water movement into soil. Some species such as the fine fescues and Kentucky bluegrass produce thatch; others such as tall fescues and perennial ryegrasses do not. De-thatching is recommended for lawns with 1/2 or more inches of thatch and should be done in the fall. It is wise to use a de-thatching machine that has fixed blades rather than a machine with blades that flip back and forth because the latter **will** not **reduce** the underlying thatch layer and **will**

damage the lawn. To deal with thatch, soil cores can be broken and spread on the lawn. If thatch is over 1 1/2" thick, total renovation is recommended.

Insect, Disease and Weed Control

The best tool for pest management is to plant grass varieties that tolerate the region's growing conditions and have the greatest resistance to insects and diseases. If you have a problem, take time to find out:

- what is the problem?
- what is the potential for damage?
- what is the best approach to solve the problem?

Avoid applying pesticides according to pre-determined calendar schedules. An exception is if you have had the problem each year and a pesticide application is the only means of control (such as for turf grubs). Begin checking for these insects in April. Insecticides should be used only when the number of **pests is high** (i.e., **5 grubs per square foot of healthy lawn**). When treatments are necessary, they should be chosen and timed to be the most effective in dealing with the specific pest and the least disruptive to natural controls. This information can be obtained from Cooperative Extension.

REMEMBER

- * A dense healthy lawn is the best defense against weed invasion.
- * Look for alternatives to grass in some areas of the yard. It will mean less work, a more interesting yard and a cleaner Long Island Sound.

For more information on **Sound Gardening** and lawns, contact your local Cooperative Extension office.

In Connecticut:

Storrs: (203)486-3435

Fairfield: (203)797-4176

Hartford: (203)241-4940

Tolland: (203)875-3331

Widham : (203)774-9600

Litchfield:

Middlesex:

New Haven:

New London:

(203)567-9447

(203)345-4511

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In New York:

Nassau (516)454-0900

Suffolk (516)727-7850

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